Pott’s Puffy Tumor in a 48-year-old Man: An Uncommon Presentation

Nishan Rajaratnam, MD and Lisa Dever, MD
Division of Infectious Diseases
Rutgers New Jersey Medical School

Introduction

Pott’s puffy tumor is defined as a subperiosteal abscess secondary to frontal skull osteomyelitis. It is commonly seen as a complication of acute frontal sinusitis affecting primarily children due to anatomical sinus differences. However, it rarely occurs in adults.

Case

A 48-year-old man with a history of chronic sinusitis presented with non-painful left supraorbital swelling that progressed over two weeks. He reported a similar, but milder episode four months prior that resolved spontaneously. The current presentation was concerning due to its rapid progression. He denied fever, chills, supraorbital pain, visual disturbances, and purulent discharge. The patient’s vital signs and lab results were within normal limits. On examination, a firm, non-tender mass was present in the left supraorbital region (Images 1-2). Brain MRI brain was consistent with an infectious process involving the paranasal sinuses with bony remodeling of the left frontal sinus and protrusion of pyogenic material into the superior orbit (Image 3). The patient was treated empirically with IV ampicillin-sulbactam and dexamethasone. The following day, he underwent bilateral sinus surgery with debridement and resection of a left frontal sinus mucocele with subsequent improvement in symptoms.

Intraoperative culture grew Streptococcus mitis, Staphylococcus epidermidis, and Eikenella spp., all susceptible to ceftriaxone. A 4-week course of therapy was planned due to extension of infection to bone.

Discussion

Although appropriate antibiotic therapy of sinusitis has reduced the occurrence of Pott’s puffy tumor, this patient’s untreated chronic sinusitis likely predisposed him to developing this condition. Pott’s puffy tumor should be included as a potential diagnosis in adults with a history of sinusitis presenting with periorbital or frontal swelling. The potential for intracranial complications such as empyema, meningitis, and abscess highlights the need for early diagnosis.

Images

References